

Instrument Panel and Interior Switches Illumination

DTC Chart: Body Control Module (BCM)

Diagnostics in this manual assume a certain skill level and knowledge of Ford-specific diagnostic practices.

REFER to: [Diagnostic Methods](#) (100-00 General Information, Description and Operation).

DTC	Description	Action
B1315:11	Backlighting (Non Reflective Controls) Illumination Output: Circuit Short To Ground	GO to Pinpoint Test B
B1315:15	Backlighting (Non Reflective Controls) Illumination Output: Circuit Short To Battery or Open	If all non-networked illumination sources are inoperative, GO to Pinpoint Test B If all non-networked illumination is always on, GO to Pinpoint Test C
B1436:01	Digital Dimmer Switch Input: General Electrical Failure	GO to Pinpoint Test A
U1000:00	Solid State Driver Protection Active- Driver Disabled: No Sub Type Information	REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules) .
U3000:49	Control Module: Internal Electronic Failure	REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules) .

All other BCM Diagnostic Trouble Codes (DTCs)	-	REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules) .
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DTC Chart: Driver Door Module (DDM)

Diagnostics in this manual assume a certain skill level and knowledge of Ford-specific diagnostic practices.
 REFER to: [Diagnostic Methods](#) (100-00 General Information, Description and Operation).

DTC	Description	Action
U2010:00	Switch Illumination: No Sub Type Information	GO to Pinpoint Test E
All other DDM Diagnostic Trouble Codes (DTCs)	-	REFER to: Locks, Latches and Entry Systems (501-14 Handles, Locks, Latches and Entry Systems, Diagnosis and Testing).

DTC Chart: Passenger Door Module (PDM)

Diagnostics in this manual assume a certain skill level and knowledge of Ford-specific diagnostic practices.
 REFER to: [Diagnostic Methods](#) (100-00 General Information, Description and Operation).

DTC	Description	Action
U2010:00	Switch Illumination: No Sub Type Information	GO to Pinpoint Test F

All other PDM Diagnostic Trouble Codes (DTCs)	-	REFER to: Locks, Latches and Entry Systems (501-14 Handles, Locks, Latches and Entry Systems, Diagnosis and Testing).
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Symptom Chart

Symptom Chart: Instrument Panel and Interior Switches Illumination

Diagnostics in this manual assume a certain skill level and knowledge of Ford-specific diagnostic practices.

REFER to: [Diagnostic Methods](#) (100-00 General Information, Description and Operation).

Condition	Possible Sources	Action
A module does not respond to the diagnostic scan tool	● Fuse ● Wiring, terminals or connectors ● Module	REFER to: Communications Network (418-00 Module Communications Network) .
All networked illumination is inoperative (non-networked illumination functions correctly)	● Network communication concern ● BCM	● PERFORM a network test. ○ If all modules pass the network test, INSTALL a new BCM. REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules, Removal and Installation). ○ If all modules do not pass the network test, REFER to: Communications Network (418-00 Module Communications Network) .

The illumination intensity of all networked and non-networked backlighting cannot be increased or decreased	Refer to the Pinpoint Test	GO to Pinpoint Test A
All non-networked illumination sources are inoperative; networked illumination functions correctly	Refer to the Pinpoint Test	GO to Pinpoint Test B
All non-networked illumination sources are always on; networked illumination functions correctly	Refer to the Pinpoint Test	GO to Pinpoint Test C
One or more non-networked illumination source is inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test D
A single non-network illuminated switch or component is always on	Illuminated switch or component	INSTALL a new illuminated switch or component.

The LHF door lock/memory set control switch illumination is inoperative or always on	Refer to the Pinpoint Test	GO to Pinpoint Test E
The RHF door lock control switch illumination is inoperative or always on	Refer to the Pinpoint Test	GO to Pinpoint Test F
The LHF door window control switch illumination is inoperative or always on	• LHF door window control switch • Power window concern	• Verify the power windows operate correctly from the LHF door window control switch. ◦ If the power windows operate correctly from the LHF door window control switch, INSTALL a new LHF door window control switch. REFER to: Front Door Window Control Switch - Vehicles With: Front Power Windows (501-11 Glass, Frames and Mechanisms, Removal and Installation). ◦ If the power windows do not operate correctly from the LHF door window control switch, REFER to: Glass, Frames and Mechanisms (501-11 Glass, Frames and Mechanisms) .
The RHF window control switch illumination is inoperative or always on	Refer to the Pinpoint Test	GO to Pinpoint Test F

The LHR door window control switch illumination is inoperative or always on	● LHR door window control switch ● Power window concern	● Verify the LHR power window operates correctly. ○ If the power window operates correctly, INSTALL a new LHR door window control switch. REFER to: Rear Door Window Control Switch - SuperCab, Vehicles With: Rear Power Windows (501-11 Glass, Frames and Mechanisms, Removal and Installation). - orREFER to: Rear Door Window Control Switch - SuperCrew, Vehicles With: Rear Power Windows (501-11 Glass, Frames and Mechanisms, Removal and Installation). ○ If the power window does not operate correctly, REFER to: Glass, Frames and Mechanisms (501-11 Glass, Frames and Mechanisms) .
The RHR door window control switch illumination is inoperative or always on	● RHR door window control switch ● Power window concern	● Verify the RHR power window operates correctly. ○ If the power window operates correctly, INSTALL a new RHR door window control switch. REFER to: Rear Door Window Control Switch - SuperCab, Vehicles With: Rear Power Windows (501-11 Glass, Frames and Mechanisms, Removal and Installation). - or REFER to: Rear Door Window Control Switch - SuperCrew, Vehicles With: Rear Power Windows (501-11 Glass, Frames and Mechanisms, Removal and Installation).

		○ If the power window does not operate correctly, REFER to: Glass, Frames and Mechanisms (501-11 Glass, Frames and Mechanisms) .
The steering wheel switch (es) illumination is inoperative or always on	Refer to the Pinpoint Test	GO to Pinpoint Test G
The IPC illumination is inoperative or does not dim	● Network communication concern ● IPC	● PERFORM the network test. ○ If the IPC passes the network test,   Click here to access Guided Routine (IPC).. ○ If the diagnostic scan tool responds with no communication with the IPC. REFER to: Communications Network (418-00 Module Communications Network) .
The FCIM illumination is inoperative or does not dim	● Network communication concern ● FCIM	● PERFORM the network test. ○ If the FCIM passes the network test,   Click here to access Guided Routine (FCIM). ○ If the diagnostic scan tool responds with no communication with the FCIM, REFER to: Communications Network (418-00 Module Communications Network) .

The FCDIM illumination is inoperative or does not dim	• Network communication concern • FCDIM	• PERFORM the network test. ○ If the FCDIM passes the network test, INSTALL a new FCDIM. Refer to the appropriate section in Group 415 for the procedure. ○ If the diagnostic scan tool responds with no communication with the FCDIM, REFER to: Communications Network (418-00 Module Communications Network) .
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Pinpoint Test

The Illumination Intensity Of All Networked And Non-networked Backlighting Cannot Be Increased Or Decreased

Refer to Wiring Diagrams Cell 71 for schematic and connector information.

Normal Operation and Fault Conditions

REFER to: Instrument Panel and Interior Switches Illumination (413-00 Instrument Panel and Interior Switches Illumination) .

BCM DTC fault trigger conditions.

DTC	Description	Fault Trigger Conditions
B1436:01	Digital Dimmer Switch Input: General Electrical Failure	A continuous and on-demand DTC that sets in when the BCM detects an open, short to voltage, or short to ground on the dim up or dim down circuit.

Possible Sources

- Wiring, terminals or connectors
- Dimmer switch (integral to the headlamp switch)
- BCM

PINPOINT TEST A : THE ILLUMINATION INTENSITY OF ALL NETWORKED AND NON-NETWORKED BACKLIGHTING CANNOT BE INCREASED OR DECREASED

A1 CHECK FOR RECORDED DIAGNOSTIC TROUBLE CODES (DTCS) FROM THE BCM (BODY CONTROL MODULE) SELF-TEST

- Ignition ON.
- Using a diagnostic scan tool, perform the BCM self-test.

Is DTC B1436:01 present?

Yes	GO to A2
No	GO to A7

A2 CHECK THE DIM UP AND DIM DOWN CIRCUITS FOR A SHORT TO VOLTAGE

- Ignition OFF.
- Disconnect: Headlamp switch C205.
- Ignition ON.
- Disconnect BCM C2280B.

Is any voltage present?

Yes	REPAIR the circuit.
No	GO to A3

A3 CHECK THE DIM UP AND DIM DOWN CIRCUITS FOR AN OPEN

- Ignition OFF.

Is the resistance less than 3 ohms?

Yes	GO to A4
No	REPAIR the circuit.

A4 CHECK THE DIM UP AND DIM DOWN CIRCUITS FOR A SHORT TO GROUND

Is the resistance greater than 10,000 ohms?

Yes	GO to A5
No	REPAIR the circuit.

A5 CHECK THE DIM UP AND DIM DOWN CIRCUITS FOR A SHORT TOGETHER

Is the resistance greater than 10,000 ohms?

Yes	GO to A6
No	REPAIR the circuit.

A6 CHECK THE HEADLAMP SWITCH GROUND CIRCUIT

Is the resistance less than 3 ohms?

Yes	INSTALL a new dimmer switch (integral to the headlamp switch). REFER to: Headlamp Switch (417-01 Exterior Lighting, Removal and Installation).
No	REPAIR the circuit.

A7 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

- Ignition OFF.
- Disconnect and inspect all BCM and related in-line connectors.
- Repair:
 - corrosion (install new connector or terminals - clean module pins)
 - damaged or bent pins - install new terminals/pins
 - pushed-out pins - install new pins as necessary
- Reconnect the BCM, related in-line connectors, and all previously disconnected illumination system connectors. Make sure all connectors seat and latch correctly.
- Operate the system to determine if the concern is still present.

Is the concern still present?

Yes	CHECK OASIS for any applicable service articles: TSB, GSB, SSM or FSA. If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern,  Click here to access Guided Routine (BCM).
No	The system is operating correctly at this time. The concern may have been caused by module connection concerns. ADDRESS the root cause of any connector or pin issues.

All Non-Networked Illumination Sources Are Inoperative; Networked Illumination Functions Correctly

Refer to Wiring Diagrams Cell 71 for schematic and connector information.

Normal Operation and Fault Conditions

REFER to: Instrument Panel and Interior Switches Illumination (413-00 Instrument Panel and Interior Switches Illumination) .

BCM DTC fault trigger conditions

DTC	Description	Fault Trigger Conditions
B1315:11	Backlighting (Non Reflective Controls) Illumination Output: Circuit Short To Ground	A continuous and on-demand DTC that sets when the BCM detects a higher than expected current draw from the backlighting illumination output circuit.
B1315:15	Backlighting (Non Reflective Controls) Illumination Output: Circuit Short To Battery or Open	A continuous and on-demand DTC that sets when the BCM detects lower than expected current draw from the backlighting illumination output circuit.

Possible Sources

- Wiring, terminals or connectors
- BCM

PINPOINT TEST B : ALL NON-NETWORKED ILLUMINATION SOURCES ARE INOPERATIVE; NETWORKED ILLUMINATION FUNCTIONS CORRECTLY

B1 BYPASS THE BCM (BODY CONTROL MODULE)

- Ignition OFF.
- Disconnect: BCM C2280B.
- **NOTE:** *If the jumper wire fuse fails during this step, refer to the Wiring Diagrams manual to identify the possible locations of the short to ground.*

Do the non-networked components illuminate?

Yes	DISCONNECT the fused jumper wire. GO to B2
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No	DISCONNECT the fused jumper wire and REPAIR the illumination circuit. After the repair: If DTC U1000:00 is present in the BCM, CLEAR the Diagnostic Trouble Codes (DTCs) and REPEAT the self-test (required to enable the illumination output driver when DTC U1000:00 is stored in the BCM). If DTC U3000:49 is present in the BCM, INSTALL a new BCM after all other Diagnostic Trouble Codes (DTCs) have been addressed. REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules, Removal and Installation). .
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B2 RETRIEVE THE DIAGNOSTIC TROUBLE CODES (DTCs) FROM THE BCM (BODY CONTROL MODULE) SELF-TEST

- Connect: BCM C2280B.
- Ignition ON.
- Using a diagnostic scan tool, perform the BCM self-test.
- Check the BCM Diagnostic Trouble Codes (DTCs).

Is DTC B1315:11 or U1000:00 present?

Yes	CHECK the circuit for an intermittent short to ground. If DTC U1000:00 is present in the BCM, a successful self-test must be completed before the illumination output is enabled.
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No	GO to B3
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B3 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

- Ignition OFF.
- Disconnect and inspect all BCM and related in-line connectors.
- Repair:
 - corrosion (install new connector or terminals - clean module pins)
 - damaged or bent pins - install new terminals/pins
 - pushed-out pins - install new pins as necessary
- Reconnect the BCM and related in-line connectors and all previously disconnected illumination system connectors. Make sure all connectors seat and latch correctly.
- Operate the system to determine if the concern is still present.

Is the concern still present?

Yes	CHECK OASIS for any applicable service articles: TSB, GSB, SSM or FSA. If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern,  Click here to access Guided Routine (BCM).
No	The system is operating correctly at this time. The concern may have been caused by module connection concerns. ADDRESS the root cause of any connector or pin issues.

All Non-Networked Illumination Is Always On; Networked Illumination Functions correctly

Refer to Wiring Diagrams Cell 71 for schematic and connector information.

Normal Operation and Fault Conditions

REFER to: Instrument Panel and Interior Switches Illumination (413-00 Instrument Panel and Interior Switches Illumination) .

BCM DTC fault trigger conditions

DTC	Description	Fault Trigger Conditions
B1315:15	Backlighting (Non Reflective Controls) Illumination Output: Circuit Short To Battery or Open	A continuous memory and on-demandDTC that sets when the BCM detects lower than expected current draw from the backlighting illumination output circuit.

Possible Sources

- Wiring, terminals or connectors
- Headlamp switch
- BCM

PINPOINT TEST C : ALL NON-NETWORKED ILLUMINATION IS ALWAYS ON; NETWORKED ILLUMINATION FUNCTIONS CORRECTLY

C1 CHECK THE EXTERIOR LIGHTING

- Ignition ON.
- Headlamp switch OFF
- Observe the parking lamps.

Are the parking lamps illuminated?

Yes	DIAGNOSE a concern with the headlamp switch. REFER to: Headlamps (417-01 Exterior Lighting) .
No	GO to C2

C2 CHECK THE BCM (BODY CONTROL MODULE) ILLUMINATION OUTPUT CIRCUIT FOR A SHORT TO VOLTAGE

- Ignition OFF.
- Disconnect: BCM C2280B.
- Ignition ON.

Are the non-networked components illuminated?

Yes	REPAIR the circuit.
No	GO to C3

C3 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

- Ignition OFF.
- Disconnect and inspect all BCM and related in-line connectors.
- Repair:
 - corrosion (install new connector or terminals - clean module pins)
 - damaged or bent pins - install new terminals/pins
 - pushed-out pins - install new pins as necessary
- Reconnect the BCM, related in-line connectors, and all previously disconnected illumination system connectors. Make sure all connectors seat and latch correctly.
- Operate the system to determine if the concern is still present.

Is the concern still present?

Yes	CHECK OASIS for any applicable service articles: TSB, GSB, SSM or FSA. If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern,  Click here to access Guided Routine (BCM).
No	The system is operating correctly at this time. The concern may have been caused by module connection concerns. ADDRESS the root cause of any connector or pin issues.

One Or More Non-Networked Illumination Source Is Inoperative

Refer to Wiring Diagrams Cell 71 for schematic and connector information.

Normal Operation and Fault Conditions

REFER to: Instrument Panel and Interior Switches Illumination (413-00 Instrument Panel and Interior Switches Illumination) .

Possible Sources

- Wiring, terminals or connectors
- Illuminated component

PINPOINT TEST D : ONE OR MORE NON-NETWORKED ILLUMINATION SOURCE IS INOPERATIVE

D1 CHECK VOLTAGE TO THE COMPONENT
• Ignition OFF. • NOTE: <i>If the headlamp switch illumination is inoperative, set the instrument panel and interior switch illumination to the brightest setting with the ignition ON prior to disconnecting the headlamp switch.</i> NOTE: <i>Anytime the EPB switch electrical connector is disconnected, the EPB system is deactivated and a DTC is stored in the ABS module. To restore the EPB system and clear the ABS module DTC, apply and release the parking brake twice within 5 seconds. Pause with the switch in the NEUTRAL position for approximately one-half second between each apply and release.</i> Disconnect: Inoperative illuminated component. • Ignition ON. • Place a shop light over the ambient light sensor and make sure the backlighting illumination reaches maximum intensity.

- Place the headlamp switch in the PARKING LAMPS or HEADLAMPS position.
- Press the illumination dim up switch until the backlighting illumination reaches maximum intensity.
- Measure:

Click to display connectors

Center Stack Switch

Positive Lead	Measurement / Action	Negative Lead
C2114-5		Ground

Is the voltage greater than 11 volts?

Yes	GO to D2
No	REPAIR the circuit.

D2 CHECK COMPONENT GROUND CIRCUIT

- Measure:

Click to display connectors

Center Stack switch

Positive Lead	Measurement / Action	Negative Lead
C2114-5		C2114-3

Is the voltage greater than 11 volts?

Yes	INSTALL a new component in question.
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No	REPAIR the circuit.
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The LH Front Door Lock/Memory Set Control Switch Illumination Is Inoperative Or Always On

Refer to Wiring Diagrams Cell 117 for schematic and connector information.

Normal Operation and Fault Conditions

REFER to: Instrument Panel and Interior Switches Illumination (413-00 Instrument Panel and Interior Switches Illumination) .

DDM DTC fault trigger conditions

DTC	Description	Fault trigger conditions
U2010:00	Switch Illumination: No Sub Type Information	A continuous and on-demand DTC that sets when the DDM detects an open or a short to ground on the door lock control switch illumination output circuit.

Possible Sources

- Communication network concern
- Wiring, terminals or connectors
- LH door lock control switch
- DDM

PINPOINT TEST E : THE LHF (LEFT-HAND FRONT) DOOR LOCK/MEMORY SET CONTROL SWITCH ILLUMINATION IS INOPERATIVE OR ALWAYS ON

E1 PERFORM A NETWORK TEST

- Ignition ON.
- Using a diagnostic scan tool, perform a network test.

Does the DDM pass the network test?

Yes	GO to E2
No	DIAGNOSE a network concern. REFER to: Communications Network (418-00 Module Communications Network) .

E2 VERIFY THE FUNCTIONALITY OF THE LHF (LEFT-HAND FRONT) DOOR LOCK CONTROL MEMORY SET CONTROL SWITCH

- Actuate the door locks from the LHF door lock control switch.

Do the door locks operate correctly?

Yes	If the switch illumination is always on. GO to E3 If the switch illumination is inoperative. GO to E4
No	REFER to: Handles, Locks, Latches and Entry Systems - Overview (501-14 Handles, Locks, Latches and Entry Systems, Description and Operation).

E3 CHECK THE DDM (DRIVER DOOR MODULE) ILLUMINATION CIRCUIT FOR A SHORT TO VOLTAGE

- Ignition OFF.
- Place the headlamp switch in the OFF position.
- Disconnect: DDM C501A.

Is the LH door lock control switch illuminated?

Yes	REPAIR the circuit.
No	GO to E10

E4 CHECK THE DDM (DRIVER DOOR MODULE) ILLUMINATION CIRCUIT FOR VOLTAGE

- Ignition OFF.
- Disconnect: LH door lock control switch C541 with memory, or C505 without memory.
- Ignition ON.
- Headlamp switch in the PARKING LAMPS or HEADLAMPS position.
- Press the illumination dim up switch until the illumination reaches full brightness.
- Measure:

Click to display connectors

With memory

Positive Lead	Measurement / Action	Negative Lead
C541-2		Ground

Is the voltage greater than 11 volts?

Yes	GO to E5
No	GO to E7

E5 CHECK FOR GROUND TO THE DDM (DRIVER DOOR MODULE) ILLUMINATION CIRCUIT

- Measure:

Click to display connectors

With memory

Positive Lead	Measurement / Action	Negative Lead
C541-2		C541-6

Is the voltage greater than 11 volts?

Yes	INSTALL a new LH door lock control switch. REFER to: Front Door Lock Control Switch (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).
No	GO to E6

E6 CHECK THE DDM (DRIVER DOOR MODULE) ILLUMINATION GROUND CIRCUIT FOR AN OPEN

- Measure:

Click to display connectors

With memory

Positive Lead	Measurement / Action	Negative Lead
C541-6	Ω	C501A-17

Is the resistance less than 3 ohms?

Yes	GO to E10
No	REPAIR the circuit.

E7 CHECK THE DDM (DRIVER DOOR MODULE) ILLUMINATION CIRCUIT FOR AN OPEN

- Ignition OFF.
- Disconnect: DDM C501A.
- Measure:

Click to display connectors

With memory

Positive Lead	Measurement / Action	Negative Lead
C541-2	Ω	C501A-15

Is the resistance less than 3 ohms?

Yes	GO to E8
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No	REPAIR the circuit.
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E8 CHECK THE DDM (DRIVER DOOR MODULE) ILLUMINATION CIRCUIT FOR A SHORT TO GROUND

- Measure:

Click to display connectors

With memory

Positive Lead	Measurement / Action	Negative Lead
C541-2	Ω	Ground

Is the resistance greater than 10,000 ohms?

Yes	GO to E9
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No	REPAIR the circuit.
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E9 CHECK THE DDM (DRIVER DOOR MODULE) ILLUMINATION CIRCUITS FOR A SHORT TOGETHER

- Measure:

Click to display connectors

With memory

Positive Lead	Measurement / Action	Negative Lead
C541-2	Ω	C541-6

Are the resistances greater than 10,000 ohms?

Yes	GO to E10
No	REPAIR the circuit.

E10 CHECK FOR CORRECT DDM (DRIVER DOOR MODULE) OPERATION

- Disconnect and inspect all DDM and related in-line connectors.
- Repair:
 - corrosion (install new connector or terminals - clean module pins)
 - damaged or bent pins - install new terminals/pins
 - pushed-out pins - install new pins as necessary
- Reconnect the DDM and all previously disconnected illumination system connectors. Make sure all connectors seat and latch correctly.
- Operate the system to determine if the concern is still present.

Is the concern still present?

Yes	CHECK OASIS for any applicable service articles: TSB, GSB, SSM or FSA. If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern, INSTALL a new DDM. REFER to: Driver Door Module (DDM) (419-10 Multifunction Electronic Modules, Removal and Installation).
No	The system is operating correctly at this time. The concern may have been caused by module connection concerns. ADDRESS the root cause of any connector or pin issues.

The RHF Door Lock Or Window Control Switch Illumination Is Inoperative Or Always On

Refer to Wiring Diagrams Cell 100 for schematic and connector information.

Normal Operation and Fault Conditions

REFER to: Instrument Panel and Interior Switches Illumination (413-00 Instrument Panel and Interior Switches Illumination) .

PDM DTC fault trigger conditions

DTC	Description	Fault trigger conditions
U2010:00	Switch Illumination: No Sub Type Information	A continuous and on-demand DTC that sets in the PDM when the smart driver reports an open circuit or short to ground on the RHF door switch illumination output circuit.

Possible Sources

- Communication network concern
- Wiring, terminals or connectors
- RH door lock control switch
- RHF door window control switch
- PDM

PINPOINT TEST F : THE RHF (RIGHT-HAND FRONT) DOOR LOCK AND/OR WINDOW CONTROL SWITCH ILLUMINATION IS INOPERATIVE OR ALWAYS ON

F1 PERFORM A NETWORK TEST

- Ignition ON.
- Using a diagnostic scan tool, perform a network test.

Does the PDM pass the network test?

Yes	GO to F2
No	DIAGNOSE a concern with the network. REFER to: Communications Network (418-00 Module Communications Network) .

F2 VERIFY THE FUNCTIONALITY OF THE RHF (RIGHT-HAND FRONT) DOOR LOCK AND POWER WINDOW CONTROL SWITCHES

- Ignition ON.
- Actuate the door locks and the RHF power window from the RHF door switches.

Do the door locks and RHF window operate correctly?

Yes	If the switch illumination is always on, GO to F3 If the switch illumination is inoperative, GO to F4
No	For door lock control switch concerns, REFER to: Locks, Latches and Entry Systems (501-14 Handles, Locks, Latches and Entry Systems, Diagnosis and Testing). For door window control switch concerns, REFER to: Glass, Frames and Mechanisms (501-11 Glass, Frames and Mechanisms) .

F3 CHECK THE PDM (PASSENGER DOOR MODULE) ILLUMINATION CIRCUIT FOR A SHORT TO VOLTAGE

- Ignition OFF.
- Headlamp switch OFF
- Disconnect: PDM C652A.
- Ignition ON.

Are the RHF door switches illuminated?

Yes	REPAIR the circuit.
No	GO to F10

F4 CHECK THE PDM (PASSENGER DOOR MODULE) ILLUMINATION CIRCUIT FOR VOLTAGE

- Ignition OFF.
- Disconnect: RHF window control switch C604.
- Disconnect: RHF door lock control switch C605.
- Ignition ON.
- Headlamp switch in the PARKING LAMPS or HEADLAMPS position.
- Press the illumination dim up switch until the illumination reaches full intensity.
- Measure:

Click to display connectors

For door lock control switch concerns:

Positive Lead	Measurement / Action	Negative Lead
C605-1		Ground

Is the voltage greater than 11 volts?

Yes	GO to F5
No	GO to F7

F5 CHECK FOR GROUND TO THE PDM (PASSENGER DOOR MODULE) ILLUMINATION CIRCUIT

- Ignition OFF.

- Measure:

Click to display connectors

For door lock control switch concern

Positive Lead	Measurement / Action	Negative Lead
C605-1		C605-3

Is the voltage greater than 11 volts?

Yes	For window control switch concerns INSTALL a new RHF door window control switch. REFER to: Front Door Window Control Switch - Vehicles With: Front Power Windows (501-11 Glass, Frames and Mechanisms, Removal and Installation). For door lock control switch concerns INSTALL a new RHF door lock control switch. REFER to: Front Door Lock Control Switch (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).
No	GO to F6

F6 CHECK THE PDM (PASSENGER DOOR MODULE) ILLUMINATION GROUND CIRCUITS FOR AN OPEN

- Measure:

Click to display connectors

For door lock control switch concern (if equipped)

Positive Lead	Measurement / Action	Negative Lead
C605-3	Ω	C652A-17

Is the resistance less than 3 ohms?

Yes	GO to F10
No	REPAIR the circuit.

F7 CHECK THE PDM (PASSENGER DOOR MODULE) ILLUMINATION CIRCUIT FOR AN OPEN

- Ignition OFF.
- Disconnect: PDM C652A.
- Measure:

Click to display connectors

For door lock control switch concerns:

Positive Lead	Measurement / Action	Negative Lead
C605-1	Ω	C652A-15

Is the resistance less than 3 ohms?

Yes	GO to F8
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No	Repair the circuit.
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F8 CHECK THE PDM (PASSENGER DOOR MODULE) ILLUMINATION CIRCUIT FOR A SHORT TO GROUND

- Measure:

Click to display connectors

For door lock control switch concerns:

Positive Lead	Measurement / Action	Negative Lead
C605-1	Ω	Ground

Are the resistances greater than 10,000 ohms?

Yes	GO to F9
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No	REPAIR the circuit.
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F9 CHECK THE PDM (PASSENGER DOOR MODULE) ILLUMINATION CIRCUITS FOR A SHORT TOGETHER

- Measure:

Click to display connectors

For door lock control switch concern

Positive Lead	Measurement / Action	Negative Lead
C605-1	Ω	C605-3

Are the resistances greater than 10,000 ohms?

Yes	GO to F10
No	REPAIR the circuit.

F10 CHECK FOR CORRECT PDM (PASSENGER DOOR MODULE) OPERATION

- Disconnect: and inspect all PDM and related in-line connectors.
- Repair:
 - corrosion (install new connector or terminals - clean module pins)
 - damaged or bent pins - install new terminals/pins
 - pushed-out pins - install new pins as necessary
- Reconnect the PDM and all previously disconnected illumination system connectors. Make sure all connectors seat and latch correctly.
- Operate the system to determine if the concern is still present.

Is the concern still present?

Yes	CHECK OASIS for any applicable service articles: TSB, GSB, SSM or FSA. If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern, INSTALL a new PDM. REFER to: Passenger Door Module (PDM) (419-10 Multifunction Electronic Modules, Removal and Installation).
No	The system is operating correctly at this time. The concern may have been caused by module connection concerns. ADDRESS the root cause of any connector or pin issues.

Steering Wheel Switch(es) Illumination Is Inoperative or Always On

Refer to Wiring Diagrams Cell 71 for schematic and connector information.

Normal Operation and Fault Conditions

REFER to: Instrument Panel and Interior Switches Illumination (413-00 Instrument Panel and Interior Switches Illumination) .

Possible Sources

- Wiring, terminals, or connectors
- Steering wheel switch(es)
- Clockspring
- Steering wheel

PINPOINT TEST G : STEERING WHEEL SWITCH(ES) ILLUMINATION IS INOPERATIVE OR ALWAYS ON



WARNING: Incorrect repair techniques or actions can cause an accidental Supplemental Restraint System (SRS) deployment. Never compromise or depart from these instructions. Failure to precisely follow all instructions could result in serious personal injury from an accidental deployment.

G1 INSPECT THE NON-NETWORKED ILLUMINATION COMPONENTS

- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS or HEADLAMPS position.
- While pressing the illumination dim up and dim down switch, monitor the non-networked illumination components.

Are all of the non-networked illumination sources inoperative or always on?

Yes	If all non-networked illumination sources are inoperative, GO to Pinpoint Test B If all non-networked illumination sources are always on, GO to Pinpoint Test C
No	If all steering wheel switch illumination is inoperative, GO to G2 If only one steering wheel switch is inoperative: GO to G5

G2 CHECK FOR ILLUMINATION VOLTAGE AT THE CLOCKSPRING

- Ignition OFF.
- Place the headlamp switch in the OFF position.
- Depower the SRS.
REFER to: [Supplemental Restraint System \(SRS\) Depowering](#) (501-20B Supplemental Restraint System, General Procedures).
- Remove the driver airbag.
REFER to: [Driver Airbag](#) (501-20B Supplemental Restraint System, Removal and Installation).
- Disconnect: Lower Clockspring C218A.
- Place a light source over the ambient light sensor so the illumination can reach maximum intensity.
- Headlamp switch in the PARKING LAMPS or HEADLAMPS position.
- Ignition ON.
- Press the illumination dim up switch until full illumination intensity is reached.

Is the voltage greater than 11 volts?

Yes	GO to G3
No	REPAIR the circuit

G3 CHECK THE ILLUMINATION GROUND CIRCUIT

- Ignition OFF.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C218A-9		C218A-8

Is the voltage greater than 11 volts?

Yes	GO to G4
No	REPAIR the circuit.

G4 CHECK THE CLOCKSPrING

- Connect Lower Clockspring C218A.
- Disconnect Upper Clockspring C218B.
- Ignition ON.
- Measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
C218B pin 9 (component side)		C218B pin 10 (component side)

Is the voltage greater than 11 volts?

Yes	INSTALL a new steering wheel. REFER to: Steering Wheel (211-04 Steering Column, Removal and Installation).
No	INSTALL a new clockspring. REFER to: Clockspring (501-20B Supplemental Restraint System, Removal and Installation).

G5 CHECK THE STEERING WHEEL HARNESS ILLUMINATION CIRCUIT FOR AN OPEN

- Ignition OFF.
- Place the headlamp switch in the OFF position.
- Depower the SRS.
REFER to: [Supplemental Restraint System \(SRS\) Depowering](#) (501-20B Supplemental Restraint System, General Procedures).
- Remove the driver airbag.
REFER to: [Driver Airbag](#) (501-20B Supplemental Restraint System, Removal and Installation).
- Disconnect the inoperative switch.
- Disconnect Upper Clockspring C218B.
- Measure:

Click to display connectors

RH steering wheel switch

Positive Lead	Measurement / Action	Negative Lead
C218B-9	Ω	C2998-8

Is the resistance less then 3 ohms?

Yes	GO to G6
No	INSTALL a new steering wheel. REFER to: Steering Wheel (211-04 Steering Column, Removal and Installation).

G6 CHECK THE STEERING WHEEL HARNESS ILLUMINATION GROUND CIRCUIT FOR AN OPEN

- Measure:

Click to display connectors

RH steering wheel switch

Positive Lead	Measurement / Action	Negative Lead
C218B-10	Ω	C2998-2

Is the resistance less then 3 ohms?

Yes	REFER to: Steering Wheel Multifunction Switch (211-05 Steering Wheel and Column Electrical Components, Removal and Installation).
No	INSTALL a new steering wheel. REFER to: Steering Wheel (211-04 Steering Column, Removal and Installation).